

New Coleoptera (Cebrionidae, Buprestidae and Cerambycidae).

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Cebrion convexifrons n. sp. (Cebrionidae).

Dark, brown, resembling *C. mandibularis* Lec. in form, only shorter, moderately pubescent.

Head with front convex, densely punctured, punctures large but not deep; labrum emarginate; mandibles prominent, when closed they leave an open space between them; antennae extending two joints beyond base of pronotum when laid alongside margin, scape stout, second joint about as long as broad, third joint slightly more than half the length of fourth, joints four to ten inclusive gradually decreasing in length, last joint constricted, considerably longer than teeth, joints three to eleven serrate.

Pronotum slightly wider than long, convex; sides broadly rounded in front, then parallel and divergent at base; disk convex, a depression on each side near front margin, lateral margin evident on basal third; surface densely punctured. Scutellum small.

Elytra wider than pronotum, about two and one-half times as long as broad; sides parallel, constricted in middle, apices acutely rounded; surface rugose, with striae rather feebly impressed, punctures of striae and intervals difficult to distinguish.

Abdomen densely punctured, last ventral broadly rounded. Intercoxal process of prosternum very narrow.

Length 13 mm.; width 4 mm.

Male *type* labeled Cleo Springs, OKLAHOMA, July 7, 1934. J. Stankavich, collector, in collection of the writer. *Paratypes* of the same locality, also Cherokee, July 3, and Vinson, Oklahoma, July 7, 1934, J. Stankavitch, collector. These are distributed in the collections of Oklahoma Agricultural and Mechanical College, Ohio State University, Prof. H. C. Fall, and the writer.

This species runs close to *C. separatus* Fall. Prof. Fall kindly compared this species with his type and states that it differs by the strongly roughened and dull surface of the elytra. In *C. separatus* Fall the elytra intervals are thickly punctate, but the punctures are simple and the surface not rugose. The punctuation of both head and thorax is much finer and closer. The front is not so strongly inflexed over the clypeus as it is in *C. convexifrons* Knull.

Agrilus parkeri n. sp. (Buprestidae).

Form robust, cupreous above and beneath, front viridescent.

Head convex, slight indication of a median depression on

vertex; surface finely granulose becoming strigate on vertex; front densely pubescent; antennae short, reaching to about middle of pronotum when laid along lateral margin, serrate from the fifth joint.

Pronotum wider than long, widest in middle, slightly wider at base than at apex; sides arcuately rounded in front, sinuate at base, when viewed from the side, marginal and submarginal carinae joined near base, disk flat in middle, a lateral depression on each side, prehumeral carinae strongly elevated; surface coarsely transversely rugose. Scutellum transversely carinate.

Elytra wider than pronotum at base; sides constricted near middle, expanded posteriorly, tips separately rounded, finely serrulate, disk with sutural margins strongly elevated posteriorly; surface imbricately punctate, recumbent pubescence short, forming an indistinct spot on basal and apical third of each elytron.

Abdomen beneath finely punctate, clothed with moderately long pubescence; first segment slightly concave, granulose, second segment somewhat flattened, a line of longer pubescence extending from prosternum to middle of second abdominal segment. Prosternal lobe broadly rounded. Hind coxae with posterior margin distinctly sinuate and with the outer posterior angle more or less acute and somewhat prolonged. Anterior and middle tibiae mucronate on inner margin at apex. Tarsal claws somewhat similar on all feet, cleft, the outer tooth long, the inner one broad and much shorter, not turned inward.

The female allotype differs from the male in having the front of the head cupreous, anterior and middle tibiae unarmed at apex, median line of long pubescence on ventral surface lacking, first two ventrals not modified.

Length 6.3 mm.; width 1.8 mm.

Described from several specimens labeled Chiricalhua Mountains, ARIZONA, July 23, 1933, F. H. Parker collector. Male *holotype* in writer's collection, *paratype* in collection of Mr. Parker.

According to Fisher's¹ key this species would run to *A. imbellis* Cr. However, the flattened pronotum will separate these two species. The male genitalia somewhat resemble those figured by Fisher for *A. fallax* Say.

***Agrilus neabditus* n. sp. (Buprestidae).**

Form robust, cupreous above and beneath.

Head convex, median depression extending from epistoma to vertex; surface strigate, lower portion of front clothed with recumbent white pubescence; antennae short, reaching to about

¹W. S. Fisher, U. S. National Museum Bull. 145, pp. 1-347, 1928.

middle of pronotum when laid along lateral margin, serrate from the fifth joint.

Pronotum convex, longer than wide, widest in front of middle; sides broadly arcuate in front, sinuate near base; when viewed from the side the marginal and submarginal carinae joined near basal fourth; disk convex, a lateral depression on each side, prehumeral carinae moderately elevated; surface coarsely transversely strigate. Scutellum transversely carinate.

Elytra wider than base of pronotum; sides constricted near middle, broadly expanded back of middle, tips separately rounded, serrulate; disk with sutural margins strongly elevated posteriorly; surface imbricately punctate, clothed with short, recumbent pubescence.

Abdomen beneath finely punctate, clothed with short pubescence, first and second segments slightly flattened; a median line of longer pubescence from prosternum to second abdominal segment. Hind coxa with posterior margin arcuately emarginate, outer posterior angle somewhat acute and prolonged. Prosternal lobe broadly rounded. Anterior and middle tibiae mucronate on inner margins at apex. Tarsal claws somewhat similar on all feet, cleft, the outer tooth slightly longer than the inner one; points not turned inward.

The female differs from the male by having the first two abdominals normal, by lacking the median ventral line of longer pubescence and by having the anterior and median tibiae unarmed at apex.

Length 5.7 mm.; width 1.5 mm.

Described from several specimens labeled Base of Pinal Mountains, ARIZONA, July 4, D. K. Duncan, collector. Male *holotype* in writer's collection, *paratype* in collection of Mr. D. K. Duncan.

According to Fisher's¹ key, this species would run to *A. abditus* Horn. However, the genitalia, which somewhat resemble those of *A. egeniformis* Champ. & Knull in outline, will at once separate the two species.

***Leptura splendens* n. sp. (Cerambycidae).**

Resembling *Leptura gigas* Lec. in size and color; piceous, elytra velvety Indian red.

Head densely finely punctured; antennae short, five joints extending beyond base of elytra when they are laid back over dorsal surface, scape stout, second joint wider than long, third joint longer than fourth, fifth joint longer than fourth, joints five to ten inclusive gradually decreasing in length, eleventh joint constricted, slightly longer than tenth, joints five to ten inclusive serrate; surface of antennae clothed with semi-erect

piceous pubescence which is longer and stouter on the first four joints.

Pronotum widest at base, considerably constricted at apex; sides rounded anteriorly to middle, then subparallel to hind angles which are acute; disk with a transverse depression at base and apex, two slight lateral depressions on each side of raised median line; surface densely finely punctured, clothed with piceous pubescence. Scutellum triangular, central part same color as elytra, edges piceous.

Elytra about two and one-half times as long as wide; sides subparallel, broadly rounded posteriorly, apices emarginately truncate; disk convex, each elytron bearing five indistinct costae; surface densely finely punctured, each puncture bearing a semi-erect hair the same color as background.

Ventral surface closely punctured, last dorsal broadly rounded, carinate, last ventral truncate.

Length 22 mm.; width 9 mm.

Type a female labeled Globe, ARIZONA, D. K. Duncan, collector, in writer's collection.

This species resembles *Leptura gigas* Lec. to some extent and should be placed next to it according to the key erected by Swaine and Hopping.² However it differs from this species by being less cuneiform; the elytra are more shining, lacking the strongly emarginate apices. The antennae are much shorter and the joints are proportionately shorter. The last dorsal segment lacks the emargination present in the females of *L. gigas* Lec. at hand.

Euderces balli n. sp. (Cerambycidae).

Form, size and color of *Euderces pini* Oliv.; two transverse ivory fasciae in the middle of each elytron. Brunneous, eyes, apical half of elytra and abdomen piceous, posterior legs darkened.

Head rugose; eyes divided, upper lobe much smaller than lower one; antennae reaching the apical fourth of elytra when laid over the dorsal surface, scape stout, second joint slightly longer than wide, third joint nearly as long as fourth and fifth joints united, fourth joint shorter than fifth, joints five to ten inclusive gradually decreasing in length, eleventh joint slightly longer than tenth, inner apical angles of joints three, four and five containing small spines, spines decreasing in length in the order mentioned; head and antennae containing long flying hairs.

²J. M. Swaine and Ralph Hopping. Bull. 52, Biological Series, No. 14, National Museum Canada, pp. 1-97, 1928.

Pronotum longer than wide, widest in middle, base constricted more than apex; sides broadly arcuate; disk convex; surface strigate, becoming rugose in center toward base, striae absent along sides and replaced by asperities, smooth area bordering anterior margin, line of dense white semi-erect pubescence bordering the basal margin, long flying hairs covering the entire surface. Scutellum triangular, clothed with dense white pubescence.

Elytra about four times as long as broad, sides parallel on basal half, expanded and broadly rounded posteriorly, apices truncate, bispinose; disk convex, each elytron containing a tuberculiform elevation near suture at base and two transverse sinuate parallel raised white lines, one at middle and the other just in front, white lines not extending to suture or side margins; surface densely coarsely punctured on basal two-thirds, apical third somewhat smoother, a line of short white pubescence on apical third of each elytron extending diagonally from suture to side margin, long flying hairs numerous.

Abdomen moderately punctured, a line of dense white pubescence on each side of first abdominal segment. Femora clavate, legs with scattered flying hairs.

Length 5.8 mm.; width 1.8 mm.

Described from a specimen labeled Baboquivora Mountains, ARIZONA, July 26, E. D. Ball collector. *Holotype* in the collection of the writer.

Some Biological Notes on *Sarcophaga bullata* Park. (Diptera: Sarcophagidae).

By S. GRAENICHER, South Miami, Florida.

In a previous paper the present writer¹ pointed to *Sarcophaga bullata* Park. as the most common and most important scavenger among the Sarcophaginae of the Miami region. It had appeared in breedings from 28 dead animals and human excrement oftener than the remaining 10 species of Sarcophaginae dealt with in that paper taken together. Since that time the following six species: *S. bishoppi* Aldr., *deceptiva* Aldr., *assidua* Wlk., *quadrisctosa* Coq., *johnsoni* Aldr., *hillifera* Aldr. have been added to the Miami list, none of which had figured in the experiments referred to above.

Competition. A considerable number of insects depend on decaying animal matter as food during the larval stage, and as a result of the severe competition the food supply is occasion-

¹ S. Graenicher. Some observations on the biology of Sarcophaginae. ENT. NEWS 42, 227-230 (1931).